- 3. The insulated glass structure of Claim 1, wherein the resin is formed with at least one component selected from the group consisting of polyols; tetrahydrofurane polymer diols; propoxylated glycols; triol; polyester glycols based on difunctional carboxylic acids and aliphatic glycols.
- 4. The insulated glass structure of Claim 2, wherein the resin is formed with at least one component selected from the group consisting of polyols; tetrahydrofurane polymer diols; propoxylated glycols; triol; polyester glycols based on difunctional carboxylic acids and aliphatic glycols.
- 5. The insulated glass structure of Claim 1, wherein at least one sheet of glass is tempered or heat strengthened glass.
- 6. The insulated glass structure of Claim 1, wherein the resin is selected from the group consisting of polyurethane, polyester and acrylic resins.
- 7. The insulated glass structure of Claim 6, wherein the polyester is a flexible low shrink polyester resin system which is formed from a reactant selected from the group consisting of phthalic anhydride, maleic anhydride, isophthalic anlydride, and terephthalic anhydride.

- 8. The insulated glass structure of Claim 6, wherein the polyester is a flexible, low shrink polyester resin formed from a reactant selected from the group consisting of glycols, propylene glycol, ethylene glycol, dipropylene glycol, diethylene glycol, neopentylene glycol and products based on glycerin or trimethanol propane.
- 9. The insulated glass structure of Claim 6, wherein the polyester is a low shrink polyester resin formed from a reagent selected from the group consisting of monomers, styrene, substitute styrenes, methyl methacrylic acid, dilute and multi-functional acrylates.
- 10. The insulated glass structure of Claim 1 wherein the resin is a flexible acrylate resins based on polyacrylic polymers and acrylic monomers.
- 11. A process for retro-fitting existing insulated windows to convert them into impact resistant insulated glass units, comprising providing

an insulated glass structure wherein said insulated glass structure comprises at least two sheets or lamina, wherein at least one of said sheets or lamina is of glass;

a spacer, which separates and supports said at least two sheets of glass, and forms an enclosed space between said two sheets a layer of a resin,

accessing said space for providing a liquid resin formulation on a surface of glass defining said space,

wherein the resin is liquid prior to cure, and curing said resin.

- 12. The process of Claim 11, which further comprises sealing said spacer.
- 13. A process for converting insulated windows into impact resistant windows comprising providing

an insulated glass structure wherein said insulated glass structure comprises at least two sheets or lamina, wherein at least one of said sheets or lamina is of glass;

a spacer, which separates and supports said at least two sheets of glass, and forms an enclosed space between said two sheets a layer of a resin,

accessing said space for providing a liquid resin formulation on a surface of glass defining said space,

wherein the resin is liquid prior to cure, and curing said resin.

- 14. The process of Claim 13, which further comprises sealing said spacer.
- 15. The process of Claim 13, wherein said resin is polyurethane, polyester or acrylate.
- 16. The process of Claim 13, wherein one of said sheets is plastic.
- 17. The process of Claim 15, wherein the resin is a polyurethane resin system formed froms an isocyanates monomer, dimmer trimer or prepolymer selected from the group

consisting of hexamethylene diisocyanate monomer; isophone diisocyanate monomer; dicyclohexyl methane 4, 4-diisocyanate monomer;

18. The process of Claim 15, wherein the resin is formed from a reagent selected from the group consisting of polyols;

tetrahydrofurane polymer diols;

propoxylated glycols and triol; polyester glycols based on difunctional carboxylic acids and aliphatic glycols

- 19. The process of Claim 15, wherein the polyester resin is formed from phthalic anhydride, maleic anhydride, isophthalic anlydride, terephthalic anhydride, or dimer acid.
- 20. The process of Claim 15, wherein the polyester resin is formed from propylene glycol, ethylene glycol, dipropylene glycol, diethylene glycol, neopentylene glycol and products based on glycerin or trimethanol propane.
- 21. The process of Claim 15, wherein the polyester resin is formed from polyester resin, styrene, substitute styrenes, methyl methacrylic acid, dilute and multi-functional acrylates.
- 22. The process of Claim 15, wherein flexible acrylate resin based on polyacrylic polymers and acrylic monomers, or methyl methacrylate, is employed.